

WHAT IS CLAIMED IS:

1. An audio signal reproducing apparatus, comprising:
scratching operation means;
5 rotational speed detection means which detects at least a
rotational speed of said scratching operation means and outputs
said rotational speed as a rotational speed signal; and
processing means for reproducing audio data, which have
already been read from an audio signal recording medium and stored,
10 in accordance with said rotational speed signal, wherein
said scratching means comprises
first operation means;
second operation means differing from said first operation
means, wherein a rotational speed of said first operation means
15 and that of said second operation means, both being achieved at
the same rotational speed, differ from each other; and
detection means for detecting which of the first and second
operation means has been actuated, wherein
said processing means reproduces said audio data in accordance
20 with said rotational speed signal output from said rotational speed
detection means through use of a reference rotational speed signal
assigned to said operation means detected by said detection means
from among a predetermined rotational speed signal of said first
operation means and a predetermined rotational speed signal of said
25 second operation means, both predetermined rotational speed signals
having been achieved at a reference rotational speed.

2. The apparatus defined in claim 1, wherein said first and
second operation means have disk-shaped operation surfaces, the

surfaces differing in radius from each other.

3. The apparatus defined in claim 1, wherein said first operation means is a jog dial; and

5 said second operation means is a turntable.

4. The apparatus defined in claim 1, wherein said rotational speed signal is a pulse signal having a cycle corresponding to a rotational speed; and

10 said processing means comprises

storage means which stores reference cycle data pertaining to a rotational speed signal output from said first operation means and reference cycle data pertaining to a rotational speed signal of the second operation means when said reference
15 rotational speed is constant double speed, wherein

said processing means reproduces said audio signal data at a reproduction speed corresponding to the cycle of said rotational speed signal output from said scratching operation means while taking, as a reference, said reference cycle data that pertain to said first
20 operation means and have been stored in said storage means when said first operation means has been actuated or said reference cycle data that pertain to said second operation means and have been stored in said storage means when said second operation means has been actuated.

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5. The apparatus according to claim 1, further comprising:
rotational angle detection means which detects a rotational angle of said scratching operation means and outputs said rotational angle as a rotational angle signal, wherein

said rotational angle signal is a pulse signal having the number of pulses corresponding to said rotational angle; wherein said processing means comprises

storage means for storing reference cycle data
5 pertaining to said rotational speed signal of said first operation means and reference pulse count data pertaining to said rotational angle signal of said first operation means and reference cycle data pertaining to said rotational speed signal of said second operation means and reference pulse count data pertaining to said rotational
10 angle signal of said second operation means, when said reference rotational speed is constant double speed and at a predetermined rotational angle; and wherein

said processing means reproduces said audio signal data in accordance with the cycle of said rotational speed signal output
15 from said scratching operation means and the number of pulses of said rotational angle signal output from said scratching operation means while taking as references said reference cycle data and said reference pulse count data, which have been stored in said storage means at the time of actuation of the first operating means and
20 pertain to said first operation means, or said reference cycle data and said reference pulse count data which have been stored in said storage means at the time of actuation of the second operating means and pertain to said second operation means.

25 6. The apparatus defined in claim 5, wherein said predetermined angle is 360°.

7. The apparatus defined in claim 3, further comprising:
variation detection means for detecting the amount of

chronological variations in said rotational speed signal output from said turntable, wherein

said processing means reproduces said audio signal while assuming that said turntable is rotating at said reference rotational speed, regardless of said rotational speed signal output from said turntable when said chronological variation is equal to or less than an allowable level and reproduces said audio signal data at a reproduction speed corresponding to the cycle of said rotational speed signal when said chronological variations exceed said allowable level.

8. The apparatus defined in claim 7, wherein said allowable value is stored in RAM of said processing means and further comprises means for changing said allowable level.

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9. The apparatus defined in claim 5, further comprising:
means for calibrating said reference cycle data and said reference pulse count data, both being stored in said storage means, on the basis of a pulse cycle and the number of pulses which are obtained when said rotational speed of said scratching operation means detected by said rotational speed detection means and said rotational angle detection means is constant double speed and when said rotational angle of said scratching operation means is 360°.

25 10. An audio signal reproduction apparatus, comprising:
rotational operation means; and
processing means which reproduces an audio signal recorded on an optical disk in accordance with at least a rotational signal representing an operation speed of said rotational operation means

and which outputs said audio signal as scratch sound, wherein
said rotational operation means includes first and second
rotational operation means; and

5 said processing means has conversion means for converting
at least either a rotational signal output from said first rotational
operation means or a rotational signal output from said second
rotational operation means such that an identical rotational signal
is achieved when said first and second rotational operation means
are rotated at the same rotational speed.

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11. The apparatus according to claim 10, wherein
said rotational signal is a pulse signal having a cycle
corresponding to said operation speed; and

15 said conversion means converts a signal through use of a ratio
of the cycle of said rotational signal of said first operation means
achieved at said reference rotational speed to the cycle of said
rotational signal of said second operation means achieved at said
reference rotational speed.

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12. The apparatus according to claim 10, wherein
said rotational signal is a pulse signal having a cycle
corresponding to said operation speed; and

25 said conversion means converts a signal by means of multiplying
the cycle of said rotational signal of said first rotational operation
means by a ratio of the cycle of said rotational signal of said
first operation means achieved at said reference rotational speed
to the cycle of said rotational signal of said second operation
means achieved at said reference rotational speed.

13. The apparatus according to claim 10, wherein
said rotational signal is a pulse signal having a cycle
corresponding to said operation speed and the number of pulses
corresponding to an operation angle; and

5 said conversion means converts a signal by means of multiplying
the cycle and number of pulses of said rotational signal of said
first rotational operation means by a ratio, said ratio standing
between the cycle and number of pulses of said rotational signal
of said first operation means achieved at a reference rotational
10 speed and a reference rotational angle and the cycle and number
of pulses of said rotational signal of said second operation means
achieved at said reference rotational speed and said reference
rotational angle.

15 14. The apparatus according to claim 10, wherein one of the
first and second rotational operation means is a jog dial, and the
other operation means is a turntable.

20 15. The apparatus according to claim 14, further comprising:
jitter detection means for detecting jitter of a rotational
signal output from said turntable, wherein

 said processing means does not output said scratch sound and
reproduces said audio signal at constant double speed when said
jitter is equal to or less than a predetermined allowable value.